A charge set allows users to recharge batteries while the receiver unit receives an external alternating power supply. An auto tuning circuit 206 automatically tunes the receiving frequency to the right tract when it is caused to drift by external forces. An audio amplifier 205 is used to amplify the audio signal and provide the output to the earphone or speaker.

IN THE CLAIMS

Cancel claims 11, 13, 18, 26, 27, 29, 33 and 34.

Rewrite claims 2, 3, 7, 8, 10, 12, 14-17, 19-25, 28, 30-32 and 35-37 as follows:

2. (amended) A transmitter for a wireless transmitter-receiver system wherein the transmitter is coupled to audio equipment having an input terminal and an out put terminal to transmit an audio signal therefrom comprising:

an automatic audio level regulating circuit comprised of an audio regulating IC, having an input terminal adapted to be connected to the output terminal of said audio equipment to regulate the audio level of an output signal from said audio equipment to a predetermined range, and an output terminal;

a signal processing circuit having an input terminal connected to the output terminal of said automatic audio level regulating circuit, and an output terminal;

an [(external and internal)] external and internal dual adjustable oscillatory frequency regulating circuit comprising an oscillator transistor, and dielectric resonator, a first variable capacitor, a second variable capacitor [diode], and a variable capacitor diode, an input terminal connected to the output terminal of said signal processing circuit, and an

output terminal; a [first intermediate] carrier frequency output being [at least about 10MHz] adjusted and set by said first and second variable [capacitor] capacitors.

an inductance antenna connected to the output terminal of said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit, said inductance antenna being a matching device; and

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a power control circuit controlled by the output signal of said audio equipment to provide the necessary working voltage to said transmitter [unit], said power control circuit comprising a signal amplifier, a comparator and a transistor switch, so that when said signal amplifier receives an input signal from said audio equipment it drives said comparator and transistor switch permitting the connection of an external power supply or battery supply to said [transmitting unit] transmitter.

3. (amended) The invention of claim 2 wherein said transmitter [unit] can be used in a wireless audio transmitting and receiving system, or wireless microphone transmitting system.

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7. (amended) The invention of claim 2 wherein said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit comprises an oscillatory transistor, a dielectric resonator, a first variable capacitor, a second variable capacitor, and a [second] variable capacitor diode, having an input terminal connected to the output terminal of said signal processing circuit, and an output terminal connected to said inductance antenna.

8. (amended) The invention of claim 7 wherein said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit comprises a first variable capacitor which is internally adjustable.

10. (amended) The invention of ~~claim~~ 7 wherein said [(]external ~~and~~ internal[)] dual adjustable oscillatory frequency regulating ~~circuit has~~ a [first intermediate] carrier frequency output [of at least 10~~MHz~~ and] is adjustable by said first and second variable [capacitor] capacitors.

12. (amended) The ~~invention~~ of claim 2 ~~wherein~~ said inductance antenna is connected to the output terminal of said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit, ~~said~~ inductance antenna being a matching device.

14. (amended) The invention of claim 2 wherein said power control circuit is controlled by the output signal of said audio equipment to provide the necessary working voltage to said transmitter [unit].

15. (amended) The invention of claim 14 wherein said power control circuit comprises a signal amplifier, a comparator and a transistor switch said signal amplifier adapted to receive an input signal from said audio equipment, said comparator and transistor switch connecting an external power supply or battery supply and said transmitter [unit].

17. (amended) The invention of claim 2 wherein said transmitter [unit] processes an audio signal input in stereo.

19. (amended) The invention of claim 2 wherein said transmitter [unit] can be used with a plurality of ~~receiving~~ earphones or speakers simultaneously.

20. A receiver for a wireless transmitter-receiver system ~~wherein~~ the system transmitter includes an inductance antenna and is adapted to be coupled to audio equipment to transmit an audio signal therefrom through an inductance antenna comprising:

a receiving antenna adapted to receive an audio signal transmitted from an inductance antenna of said transmitter [unit].

an [(external and internal)] external and internal dual adjustable oscillatory frequency regulating circuit comprising an oscillatory transistor, a dielectric resonator, and a first variable capacitor, a second variable capacitor, and a variable capacitor diode, an input terminal connected to the output terminal of said receiving antenna, and an output terminal;

a signal processing circuit connected to said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit to process received signals and to provide a processed signal to said [earphone] receiver;

an automatic 24-time frequency divider circuit comprising a resistor and an oscillator , connected to [an] a first IC of said receiver signal processing circuit to divide the frequency of said received signal by 24, so as to provide a 19KHz three-dimensional demodulated signal; and

an auto-shut off circuit comprising [an] a second IC and a transistor, said transistor being controlled by said second IC to turn a power supply on/off.

21. (amended) The [invention] receiver of claim 20 wherein said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit comprises an oscillatory transistor, a dielectric resonator, a first variable capacitor, [and] a second variable capacitor and a variable capacitor diode.

22. (amended) The [invention] receiver of claim 21 wherein said [(]external and internal[)] dual adjustable oscillatory frequency regulating circuit has an input terminal connected to the output terminal of said receiving antenna, and an output terminal connected to said signal processing circuit.

23. (amended) The [invention] receiver of claim 21 wherein said [()external and internal[)] dual adjustable oscillatory frequency regulating circuit includes [a] an adjustable frequency controller VR1 [adjustable externally by users].

24. (amended) The [invention] receiver of claim 21 wherein said [()external and internal[)] dual adjustable oscillatory frequency regulating circuit has a first intermediate frequency at least above 10MHz.

[frequency regulating circuit has the capability to broadly adjust the frequency, and to downconvert]

25. (amended) The [invention] receiver of claim 21 wherein said [()external and internal[)] dual adjustable oscillatory frequency regulating circuit provides a local oscillatory frequency that can be broadly adjusted without a conventional SAW and which fixes [the] a first local oscillatory frequency and adjusts [the] a second local oscillatory frequency.

28. (amended) The [invention] receiver of claim 27 wherein said signal processing circuit is capable of processing received signals and providing processed signals to said receiver [unit].

30. (amended) The [invention] receiver of claim 27 wherein said signal processing circuit is capable of demodulating stereo audio signals to provide high fidelity 19KHz multi-demodulating signals.

31. (amended) The [invention] receiver of claim 20 wherein said auto-shut off circuit [is comprise of] comprises an integrated circuit and [transistors] a transistor, said auto-shut off circuit being controlled by the second IC [of said auto-shut off] to automatically turn an external power supply or battery supply on and off.

32. (amended) The [invention] receiver of claim 31 wherein said auto-shut off circuit can automatically turn on said receiver [unit] when it receives an audio signal and automatically turn off said receiver [unit] when it receives no audio signal after a predetermined period of time.

35. (amended) The [invention] receiver of claim 20 wherein said receiver[unit] is housed in an earphone.

36. (amended) The [invention] receiver of claim 20 wherein said receiver [unit] can be used in a wireless audio receiving speaker, [and wireless microphone].

37. (amended) The receiver of claim 21 wherein said receiver unit[, being wireless, can be positioned or relocated from place to place by users] is portable.

Add claims 38-57 as follows:

38. A transmitter for a wireless transmitter-receiver system wherein the transmitter is adapted to be coupled to audio signal generating equipment to transmit an audio signal therefrom and to a power supply comprising:

an automatic audio level regulating circuit including an audio regulating IC, having an input terminal adapted to be connected to said audio equipment to regulate the audio level of an output signal from said audio equipment to a predetermined range, and an output terminal;

a signal processing circuit having an input terminal connected to the output terminal of said automatic audio level regulating circuit, and an output terminal;

an external and internal dual adjustable oscillatory frequency regulating circuit comprising an oscillator transistor, and dielectric resonator, a first variable capacitor, a

second variable capacitor, and a variable capacitor diode, an input terminal connected to the output terminal of said signal processing circuit, and an output terminal; a carrier frequency output being [at least about 10MHz] adjusted by said first and second variable capacitors;

an inductance antenna connected to the output terminal of said external and internal dual adjustable frequency regulating circuit, said inductance antenna being a matching device; and

an automatic power control circuit controlled by the output signal of said audio equipment to provide the necessary working voltage to said transmitter unit, said power control circuit comprising a signal amplifier, a comparator and a transistor switch, so that when said signal amplifier receives an input signal from said audio equipment it drives said comparator and transistor switch permitting the connection of an external power supply or battery to said transmitter.

39. The transmitter of claim 38 wherein said automatic audio level regulating circuit comprises an audio level regulating IC, having an input terminal adapted to be connected to an output terminal of said audio equipment to regulate the audio level of the output signal of said audio equipment to a predetermined range, and an output connected to said signal processing circuit.

40. The transmitter of claim 38 wherein said signal processing circuit has an input terminal connected to the output terminal of said automatic audio level regulating circuit, and an output terminal connected to said external and internal dual adjustable oscillatory frequency regulating circuit.

41. The transmitter of claim 38 wherein said signal processing circuit comprises a 3-dimensional signal multi-regulating circuit through which pilot signals can be regulated

and transmitted to said external and internal dual adjustable oscillatory frequency regulating circuit.

42. The transmitter of claim 38 wherein said external and internal dual adjustable oscillatory frequency regulating circuit comprises an oscillatory transistor, a dielectric resonator, two variable capacitor VCA and VCB, and a variable resistor VR1, having an input terminal connected to the output terminal of said signal processing circuit, and an output terminal connected to said inductance antenna.

43. The transmitter of claim 42 wherein said external and internal dual adjustable oscillatory frequency regulating circuit comprises VCA and VCB are adjustable by adjusting VR1.

44. The transmitter of claim 42 wherein said external and internal dual adjustable oscillatory frequency regulating circuit has a carrier frequency output being adjusted and set by said first and second variable capacitors.

45. The transmitter of claim 42 wherein said inductance antenna is connected to the output terminal of said external and internal dual adjustable oscillatory frequency regulating circuit; said inductance antenna being a matching device.

46. The transmitter of claim 42 wherein said power control circuit is responsive to an output signal of said audio equipment to provide the necessary working voltage to said transmitter.

47. The transmitter of claim 42 wherein said automatic power control circuit comprises a signal amplifier, a comparator and a transistor switch, said signal amplifier adapted to receive a signal from said audio equipment, said comparator and transistor switch connecting an external power supply or battery and said transmitter.

48. The transmitter of claim 42 wherein said power control circuit is controlled automatically by an audio signal from said audio equipment or manually.

49. The transmitter of claim 42 wherein said transmitter processes an audio signal input into stereo.

50. A receiver for a wireless transmitter-receiver system wherein the system includes a transmitter adapted to be coupled to audio equipment to transmit an audio signal therefrom through an inductance antenna comprising:

a receiving antenna adapted to receive an audio signal transmitted from the inductance antenna of said transmitter;

an external and internal dual adjustable oscillatory frequency regulating circuit comprising an oscillatory transistor, a dielectric resonator, and two variable capacitors VCA and VCB, and input terminal connected to the output terminal of said receiving antenna, and an output terminal;

a signal processing circuit connected to said external and internal dual adjustable oscillatory frequency regulating circuit to process received signals and to provide a processed signal to said headphones or speakers;

an automatic 24-time frequency divider circuit comprising a resistor and an oscillator connected to a first IC of said receiver signal processing circuit to divide the frequency of said received signal by 24, so as to provide a 19KHz three-dimensional demodulated signal; and

an auto-shut off circuit comprising a second IC and a transistor, said transistor being controlled by said IC to turn a power supply on/off.

51. The transmitter of claim 50 comprising an external and internal dual adjustable oscillatory frequency regulating circuit identical to that of said receiver.

52. The receiver of claim 50 wherein said external and internal dual adjustable oscillatory frequency regulating circuit includes a variable resistor to adjust the frequency of a received signal externally.

53. The receiver of claim 50 wherein said external and internal dual adjustable oscillatory frequency regulating circuit provides a local oscillatory frequency that can be broadly adjusted without a conventional SAW and which fixes a first local oscillatory frequency and adjusts a second local oscillatory frequency.

54. The receiver of claim 50 wherein said signal processing circuit is capable of demodulating stereo audio signals to provide high fidelity 19KHz multi-demodulating signals.

55. The receiver of claim 50 wherein said auto-shut off circuit is controlled by the second IC to automatically disconnect or connect said receiver and an external power supply or battery.

56. The receiver of claim 50 wherein said auto-shut off circuit can automatically activate said receiver unit when it receives an audio signal and automatically deactivate said receiver unit when it receives no audio signal.

57. The receiver of claim 50 wherein said receiver is portable.

REMARKS

In the above referenced Office Action the Examiner required a Consent of Assignee. However, this application and its U. S. parent, U. S. Patent No. 5,722,050 were not assigned.